

SN 10/666,989

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Docket No. S-100,628

In Response to Office Action dated 02/08/2005

REMARKS

In the Office Action of February 8, 2005, Examiner has placed a restriction requirement, grouping Claims 1-5 into Group I, and Claims 6-8 into Group II. Applicants made a provisional election with traverse to prosecute Group I. After review of Examiner's argument, applicants agree with Examiner and do not elect to traverse the restriction requirement. Therefore, Claims 6-8 (group II) stand withdrawn from further consideration by Examiner.

Examiner has rejected Claims 1-5 (Group I) as rejected under 35 U.S.C. 102(b) as being anticipated by Dietrich (5,435,889). Examiner states that Dietrich discloses "an article comprising a surface on the article for supporting a coating, undercut grooves defined by the article depending beneath the surface to a bottom portion, the grooves having an upper width on the surface and a lower width on the bottom portion connected by side walls, where at least one of the side walls connects the upper width and the lower width to form an undercut angle with the surface less than 90°..."

Applicants respectfully traverse this rejection. Review of Dietrich yields no element of "undercut grooves" as defined in applicant's application. Rather, Dietrich teaches prior art as described in applicant's application section "Background of The Invention" and disclosed in reference "Flame Spray Handbook, Vol.1" Metco, Inc. (1964) by A.P. Shepard, as well as in disclosed U.S. patents 6,316,078 and 5,558,922. In Dietrich, only open grooves, in this case "V" shaped grooves, are taught. By applicant's definition there are no "undercut" features in an open "V", where the angle between the surface and the groove wall is by definition GREATER than 90° (otherwise there could not be a "V" shape).

Referring to Figure 2 in applicants application, and the description of Figure 2 on Page 4 beginning at line 23, the present invention comprises grooves that include undercut angles  $\theta$ , that define a depending wall of the groove as one moves down into the groove, thereby forming an overhang by the surface over the bottom of the groove. This overhang creates a "shadow" over the groove that allows little or no coating to be

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deposited along the sides of the grooves directly below the undercut angle created by the walls of the groove and the deposition surface.

Comparison of applicants Figure 2 with Dietrich Figures 1-4 , clearly shows the undercut groove element of the present invention does not exist the teachings of Dietrich; nor is there any teaching or suggestion within the specification of Dietrich that describes an undercut grooves as defined in applicant's application. Therefore, a 35 U.S.C. 102(b) rejection is not appropriate.

Thus, the Examiner is requested to allow Claims 1-5, and to pass this case to issue.

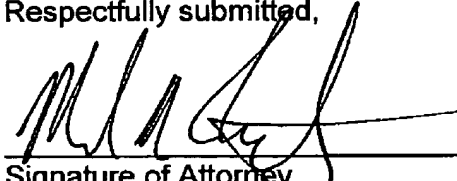
Applicant's attorney would be pleased to further discuss this matter by telephone with the Examiner if the Examiner concludes such a discussion would assist in moving this case to issue.

No new matter has been added as a result of this response.

Date: February 16, 2005

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Respectfully submitted,

  
Signature of Attorney

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